

UHF Synthesized Diversity Tuner

Operating Instructions URX-P03D

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Features

The URX-P03D UHF Synthesized Diversity Tuner is a two-channel portable wireless tuner.

In combination with a compact camcorder or interchangeable-lens digital camera, the unit can be used for various purposes, such as ENG (Electronic News Gathering), EFP (Electronic Field Production), sports events, and weddings.

This unit is equipped with a DSP for transmission of highquality sound using digital compander processing. It can also be used in combination with current Sony analog wireless microphone systems (UWP series, WRT series, WRR series, WRU series) by switching the compander mode

The frequency and compander mode set on the unit can be sent to the transmitter using an infrared communications link. Used in combination with the Clear Channel Scan function, this greatly reduces the time required to set channels.

External microphone input port

The unit is equipped with an external input connector that supports plug-in power external microphones and Sony BMP-type lavalier microphones.

Internal mixing function

You can individually assign the audio signal inputs from tuner 1, tuner 2, and the external microphone to OUTPUT 1 (L channel), OUTPUT 2 (R channel), or both via menu settings. This allows you to freely mix the audio signals to be output as stereo or monaural sound and allows for fast production of materials.

Diversity reception system

The unit employs a space diversity system to minimize dropouts (true diversity system during one-channel operation for higher stability).

Compatibility with Sony analog wireless microphones

The built-in DSP enables digital companding for highquality audio transmissions. Switching to compander mode allows operation in conjunction with Sony analog wireless microphone system (UWP series and WRT series) transmitters.

Built-in channel scanning function

The unit includes two built-in frequency scanning functions; "Clear Chanel Scan" which scans for unused channels and "Active Channel Scan" which scans for used channels on which reception is possible. This allows you to quickly configure stable channels for use.

Built-in infrared communication function

When operating in conjunction with UWP-D series transmitters, the frequency and compander mode settings configured on the unit can be sent using the infrared communication function, allowing you to complete channel configurations quickly.

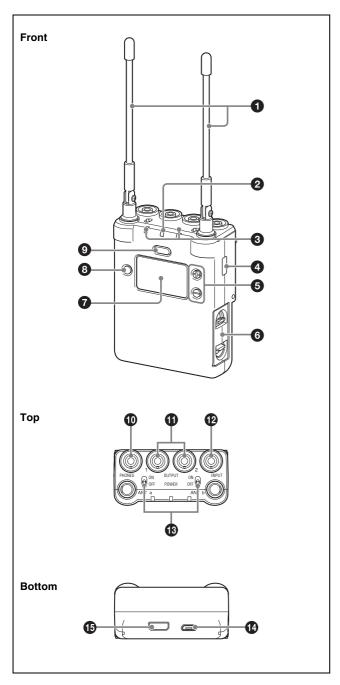
Operation via two size AA batteries

The unit will operate for 5 hours on two size AA alkaline batteries. Nickel metal hydride and lithium batteries can also be used.

Multi Interface Shoe support

Using the optional SMAD-P3D shoe mount adapter (not supplied) allows you to mount the unit on cameras equipped with a Multi Interface Shoe (e.g., Sony video camera recorders and interchangeable-lens digital cameras) and send audio signals from the unit to the camera without cable connections.

Parts Identification



Antennas

2 POWER indicator

Displays the battery level and charging status.

Indicator display	Status
On (green)	Sufficient battery level
Flashing (green)	Battery is getting low
On (orange)	Charging (when rechargeable nickel metal hydride batteries are inserted and power is turned off)

Indicator display	Status
Flashing (red)	Charging not possible (when batteries other than rechargeable nickel metal hydride batteries are inserted or the nickel metal hydride batteries are deteriorated)
	Note
	Disconnect the USB cable, and replace the batteries.
Off	Power is off or battery is empty

3 RF (radio frequency) indicators

Indicate the RF input level of tuner 1 and tuner 2.

On in green: 25 dB μ or more On in red: 15 dB μ to 25 dB μ Off: Less than 15 dB μ 0 dB μ = 1 μ V_{EMF}

4 Infrared transmission port

Transmits the frequency and compander mode settings configured on the unit to the transmitter.

6 + or – button

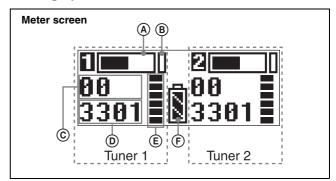
Use to select a function or value.

6 Battery compartment

Accepts two AA batteries (alkaline, nickel metal hydride, or lithium batteries).

For details on how to insert batteries, see "Power Supply" (page 6).

7 Display section



Audio input level meter

Indicates the input signal level.

B Peak indicator

Warns of excessive input by lighting up when the signal is 3 dB below the level at which distortion begins.

© Group display

Displays the name of the receive group that is configured.

© Channel display

Displays the name of the receive channel that is configured.

(E) RF level meter

Indicates the RF input level. The number of segments that light up depends on the input level.

6 segments lit: 60 dBμ or higher 5 segments lit: 50 to 60 dBμ 4 segments lit: 40 to 50 dBμ 3 segments lit: 30 to 40 dBμ 2 segments lit: 20 to 30 dBμ 1 segment lit: 10 to 20 dBμ All segments off: 10 dBμ or less

(F) Battery level indicator

Displays the battery level. "EXT" is displayed when power is supplied from the USB connector. "MI" is displayed when power is supplied from an SMAD-P3D (not supplied).

For details, see "Battery level indicator" (page 6).

8 SET button

Changes the item to be set or enters the selected function or parameter value.

9 MENU button

Switches the menu that appears in the display.

10 PHONES (monitor) connector (3.5-mm diameter, stereo mini jack)

Connect to headphones to monitor the audio output.

Note

Do not connect headphones with a monaural mini jack. This may short-circuit the headphone outputs, resulting in distorted sound output.

1 OUTPUT 1/2 (audio output 1/2) connectors (3.5-mm diameter, stereo mini jack, balanced output)

Connect one end of the supplied XLR-BMP conversion output cable or the stereo mini plug-BMP conversion cable here and the other end to the microphone input on a camcorder, mixer, or amplifier. If the microphone input connector on the connected device is a stereo mini jack, connect the straight (BMP) plug to the tuner and the L-shaped (stereo mini) plug to the microphone input connector on the device.

Note

To prevent damaging the tuner, do not apply a voltage to this connector from a microphone external power supply or other source.

MIC INPUT (audio input) connector (3.5-mm diameter, stereo mini plug)

Connect to a plug-in power external microphone or Sony BMP-type lavalier microphone.

13 POWER switches

Turn tuner 1 and tuner 2 on or off individually.

13 USB connector (Micro B type)

Connect to a commercially available USB portable power supply.

When the power is turned on, the unit operates with power supplied by the USB portable power supply. When nickel metal hydride batteries are inserted and the power is turned off, the battery is charged by the USB portable power supply.

Note

Alkaline batteries and lithium batteries cannot be recharged.

(b) Auxiliary connector

Used to connect external accessories.

Power Supply

The unit operates from two AA batteries (alkaline, nickel metal hydride, or lithium batteries), power supplied from a supply connected to the USB connector, or power supplied from the auxiliary connector. The power supply that has precedence when both AA battery power and an external power supply via the USB connector or auxiliary connector are available can be specified using the PWR SOURCE (external power selection) function. Under the factory default setting, the power supplied from inserted AA batteries has precedence. For details about inserting batteries and displaying the battery level, or supplying power from supply connected to the USB connector, see the following sections.

For details on the PWR SOURCE function setting, see "Selecting the preferred power supply (PWR SOURCE)" (page 13).

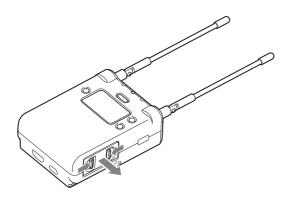
Note

The use of manganese batteries will result in poor performance. Do not use manganese batteries.

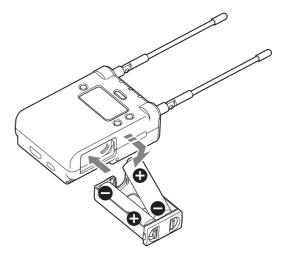
Inserting the Batteries

Notes

- Always use sets of the same type of battery. Do not use batteries of different types or batteries with different charge level together.
- Replacing the batteries during operation may generate a large noise. Be sure to turn off the unit before replacing the batteries.
- **1** Turn the power off.
- 2 Slide the two catches inward (as indicated) and pull the battery compartment out.



3 Insert two new AA batteries into the battery compartment with ⊕ and ⊖ polarities in the correct orientation, and close the compartment.



Make sure that the battery compartment is locked securely.

Battery level indicator

When tuner 1 or tuner 2 is turned on, the unit's remaining battery level apears in the display section. Immediately replace both batteries with new batteries if the indicator starts flashing (indication 5 below). If using new alkaline batteries, use after checking the recommended time limits.

	Battery level indicator	Battery status
1	Lights	Good
2	Lights	Less than 70% charge remaining
3	Lights	Less than 40% charge remaining
4	Lights	Less than 20% charge remaining
5	Flashes	Almost empty

Notes

- When BATTERY is set to TYPE1, the battery level is indicated based on the use of new LR6 (size AA) Sony alkaline batteries. The battery level may not be displayed correctly when different kinds of batteries, different brand of batteries, or old batteries are used. If using batteries other than size AA alkaline batteries, select the battery type using the BATTERY function.
- If you plan to use the unit continuously for a long period of time, it is recommended that you replace the batteries with brand new ones.

• Battery power is gradually consumed, even when the unit is turned off. Remove the batteries from the unit before prolonged periods of disuse.

For details on the BATTERY function setting, see "Setting the battery type (BATTERY)" (page 14).

Battery precautions

Batteries may leak or explode if mistreated. Be sure to follow these instructions.

- Insert batteries in the correct ⊕ and ⊖ polarity orientation.
- Always replace the two batteries together with new ones
- Do not use different types of batteries or old and new ones together.
- Dry cells are not rechargeable.
- When not using the device for a long period of time, remove the batteries. If the batteries leak for any reason, consult your Sony service representative.

Supplying Power from a USB Connector

The unit can operate from a commercially available USBoutput type AC adapter or portable power supply connected to the USB connector.

When supplying power using a USB-output type AC adapter or portable power supply, use a unit that satisfies the following conditions.

• Output connector: USB micro B type

• Rated voltage: 5 V

• Output current: 200 mA or higher

Displays "EXT" when power is supplied from the USB connector.

Charging Nickel Metal Hydride Batteries

You can charge nickel metal hydride batteries inserted in the unit.

When charging nickel metal hydride batteries, turn the power off and connect a commercially available USB-output type AC adapter or portable power supply to the USB connector.

The POWER indicator is lit orange while charging batteries. When charging is finished, the POWER indicator goes off.

When charging batteries using a USB-output type AC adapter or portable power supply, use a unit that satisfies the following conditions.

• Output connector: USB micro B type

• Rated voltage: 5 V

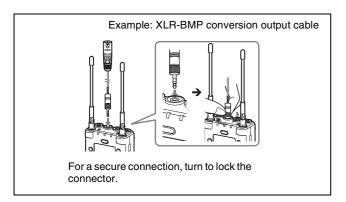
• Output current: 1 A or higher

Notes

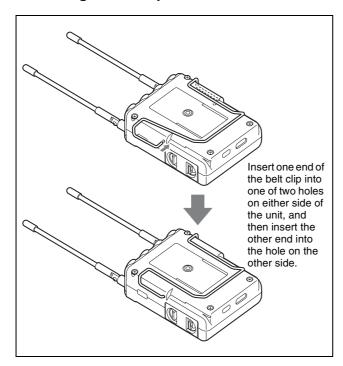
- Charging may not be supported, depending on the connected AC adapter, portable power supply, computer port, or rechargeable batteries.
- Nickel metal hydride batteries are not charged while the unit is turned on.

Attaching Accessories

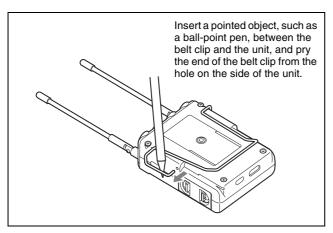
Connecting the conversion cable to the OUTPUT connector



Attaching a belt clip



To remove a belt clip

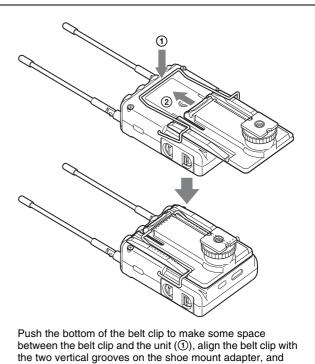


Attaching the shoe mount adapter

Attach the belt clip before attaching the shoe mount adapter.

Note

Attach belt clips upside-down if planning to attach the shoe mount adapter.

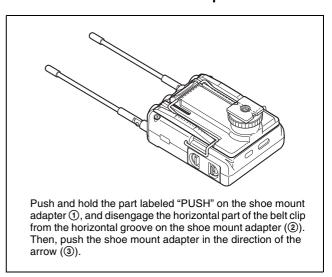


the two vertical grooves on the shoe mount adapter, and insert the adapter in the direction of the arrow (②). Push the shoe mount adapter in fully until the belt clip fits into the horizontal groove on the adapter holds.

Note

If attaching a camcorder, bend the unit's antenna down so that the antenna is not reflected on the display.

To remove the shoe mount adapter



Settings

Setting the Receive Channel

For details about the channel groups and channels that can be selected, refer to the "Frequency List" on the CD-ROM.

Note

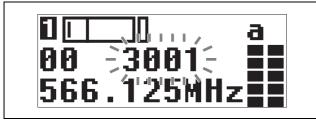
To prevent interference and noise, beware of the following.

- Do not use multiple transmitters that have been set to the same channel at the same time.
- When using two or more channels at the same time, always configure different channels within the same group.
- Keep all transmitters and receivers at least 3 m away from each other.
- 1 Set the POWER 1 or POWER 2 switch to ON.
- 2 Press the MENU button to display the RX1 or RX2 menu, and press the + or button to display the GP/CH screen.
- **3** Press and hold the SET button for 1 second or longer. The channel group display starts flashing.



4 Use the + or – button to select the desired group name, then press the SET button.

The channel group is set, and the channel number display starts flashing.



5 Use the + or – button to select the desired channel number, then press the SET button.

The displays stops flashing and the desired channel is set

Notes

- If there is no user input within 10 seconds after the channel group display or channel number display starts flashing, the displayed setting that is flashing is saved. The same applies when setting other parameters.
- The frequency indicator changes in response to the channel number.
- The unit continues to receive, even when setting the receive channel.
- If the power supply cuts off while you are configuring settings, perform the configuration procedure again from the beginning.
- Make sure that the same channel is set on transmitters and receivers within the same system.

Searching for Available Channels within a Group (Clear Channel Scan)

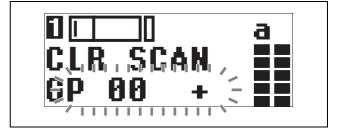
You can search for available channels within the specified channel group.

Before performing this procedure, select the channel group.

For details, see "Setting the Receive Channel" (page 9).

- 1 Press the MENU button to display the RX1 or RX2 menu, and press the + or button to display the CLR SCAN screen.
- **2** Press and hold the SET button for 1 second or longer.

Press and hold until the channel group and "+" display starts flashing.



3 Press the + button.

The unit starts to scan through the selected channel group. When available channels are found, the first channel number among the available channels starts flashing on the display.

To display the next available channel number Press the + button.

To cancel searching

Press the – button. The display returns to the CLR SCAN screen.

4 Press the SET button when the desired channel number starts flashing.

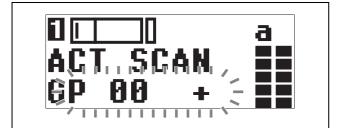
The search for available channels finishes and the displayed channel is set.

Searching for Active Channels within a Group (Active Channel Scan)

You can search for channels in use within the specified channel group. This is useful when using more than one receiver in combination with a single transmitter. Before performing this procedure, select the channel group.

For details, see "Setting the Receive Channel" (page 9).

- 1 Press the MENU button to display the RX1 or RX2 menu, and press the + or button to display the ACT SCAN screen.
- **2** Press and hold the SET button for 1 second or longer. Press and hold until the channel group and "+" display starts flashing.



3 Press the + button.

The unit starts to scan for active channels in the selected channel group. When active channels are found, the first channel number among the active channels starts flashing on the display.

To display the next active channel number Press the + button.

To cancel searching

Press the – button. The display returns to the ACT SCAN screen.

4 Press the SET button when the desired channel number starts flashing.

The search for active channels finishes and the displayed channel is set.

Setting the Compander Mode

Depending on the transmitter being used in conjunction with the unit, changing the compander mode may be necessary.

You can configure different compader modes for tuner 1 and tuner 2.

Notes

- When operating in conjunction with UWP-D series transmitters, set the transmitters to the same compander mode.
- No audio will be output if the tone signal frequency is different due to inconsistencies in compander mode settings configured on the devices being used together.
- 1 Press the MENU button to display the RX1 or RX2 menu, and press the + or button to display the COMPANDER screen.
- **2** Press and hold the SET button for 1 second or longer. The selected item starts flashing.



3 Use the + or – button to select the compander mode, then press the SET button.

The selected compander mode is configured.

UWP-D: Select this when operating in conjunction with Sony UWP-D series transmitters.

UWP: Select this when operating in conjunction with Sony UWP series transmitters.

WL800: Select this when operating in conjunction with Sony WRT series transmitters.

Transmitter and compander mode combinations

Configure the appropriate compander mode based on the transmitters being used.

Note

Audio will not be output if the combination of transmitters and compander mode settings are not correct.

Transmitter		Compander mode on unit		
		UWP-D	UWP	WL800
UWP-D series (UTX-B03, UTX-M03, UTX-P03, UTX-B03HR)	Compander mode: UWP-D	Yes	No	No
	Compander mode: UWP	No	Yes	No
	Compander mode: WL800	No	No	Yes
UWP series (UTX-B2, UTX-H2, UTX-P1)		No	Yes	No
WRT series (WRT-822, etc.)		No	No	Yes

Using the Infrared Communication Function

When operating in conjunction with UWP-D series transmitters, the frequency and compander mode settings configured on the unit can be sent and applied to the transmitter using the infrared communication function.

Note

This function cannot be used when operating in conjunction with UWP or WRT series transmitters.

Searching for available channels and configuring the channel settings via infrared communication (AUTO SET)

- Press the MENU button to display the RX1 or RX2 menu, and press the + or button to display the AUTO SET screen.
- **2** Press and hold the SET button for 1 second or longer. "YES" flashes on the display.



3 Press the SET button.

Clear Channel Scan starts searching for an available channel.

When Clear Channel Scan finishes, the channel with the least noise and interference will be set.

When the channel is set, infrared transmission starts automatically.

Note

Some noise may occur when power is turned on. Accordingly, turn down the audio input level of devices connected to the unit when turning the power on.

- **4** Press and hold the SET button on the transmitter and press the POWER/MUTING button to turn the power on.
- **5** Place the infrared transmitter port on the unit near the infrared detector on the transmitter.

Information about the channel set on the unit is sent to the transmitter, and a prompt appears on the transmitter display asking if you want to change to that frequency.



6 Use the + or – button to select "YES," then press the SET button on the transmitter.

This sets the transmit channel and compander mode.

Notes

- The infrared transmission from the unit in step **3** continues for about 10 seconds. Perform steps **4** and **5** within those 10 seconds. If 10 seconds have elapsed, you can reestablish the infrared link using the SYNC screen on the unit.
- Place the unit and transmitter within about 20 cm (8 in.) of each other.
- If 5 seconds elapse without any user input after the prompt appears on the transmitter display, the transmitter returns to its previous state without changing the frequency.
- Communications using the infrared link may be adversely affected, depending on the surrounding environment. If this occurs, use the SYNC screen on the unit to reestablish the link.

Configuring the group/channel manually and configuring the channel settings via infrared communication (SYNC)

- 1 Configure the group/channel settings (page 9).
- 2 Press the MENU button to display the RX1 or RX2 menu, and press the + or button to display the SYNC screen.
- **3** Press and hold the SET button for 1 second or longer. A confirmation screen appears.
- 4 Use the + or button to select "YES," then press the SET button.
- **5** Press and hold the SET button on the transmitter and press the POWER/MUTING button to turn the power on.
- 6 Place the infrared transmitter port on the unit near the infrared detector on the transmitter.

Information about the channel set on the unit is sent to the transmitter, and a prompt appears on the transmitter display asking if you want to change to that frequency.



7 Use the + or – button to select "YES," then press the SET button on the transmitter.

This sets the transmit channel and compander mode.

Adjusting the Monitor Audio Level

You can set the monitor audio level within the range 1 to 16.

1 Press the MENU button to display the meter screen, and use the + or – button to display PHONES.

The current monitor audio level is displayed.



- **2** Press and hold the SET button for at least one second. Press and hold until the monitor audio level flashes.
- **3** Use the + or button to set the desired monitor audio level, then press the SET button.

The setting value is stored. The setting is retained even after the power is turned off.

Menu Displays and Detailed Settings

Menu Structure and Hierarchy

Menu structure

UTILITY menu

You can display the UTILITY menu from the meter screen which displays information on tuners 1 and 2. This menu allows you to configure basic settings for the unit.

RX1 (tuner 1) menu

This menu allows you to configure settings for RX1 (tuner 1).

RX2 (tuner 2) menu

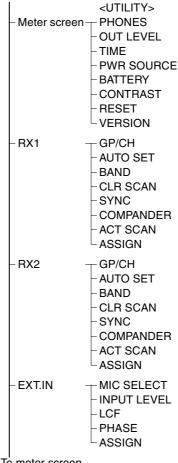
This menu allows you to configure settings for RX2 (tuner 2).

EXT.IN menu

This menu allows you to configure settings for the microphone connected to the external input connector.

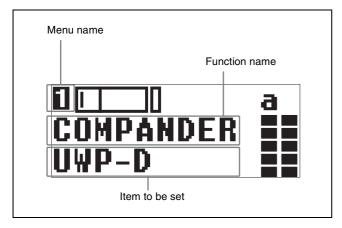
Menu hierarchy

MENU



To meter screen

Basic Menu Operations



1 Press the MENU button repeatedly to select the menu.

Each time you press the MENU SELECT button, the menu changes in the following order: meter screen, RX1, RX2, EXT.IN, meter screen If you want to configure settings in the UTILITY menu, display the meter screen.

- 2 Press the + or button repeatedly until the function to be set appears.
- **3** Hold down the SET button until the item to be set flashes.
- 4 Press the + or button to change the setting.
- **5** Press the SET button to apply the setting.

Note

When the tuner is turned off, the menus corresponding to that tuner are not displayed.

UTILITY Menu

The UTILITY menu includes items related to the basic receiver settings, including the meter screen. These functions and parameters are explained here. Underlined items are the factory setting.

Adjusting the monitor audio level (PHONES)

Adjusts the monitor audio level for the headphones. The factory default setting is 12.

For details, see "Adjusting the Monitor Audio Level" (page 12).

Setting the audio output level (OUT LEVEL)

Sets the audio output level. You can set the level in 3 dB increments in the range -12 dB to +12 dB. The factory default setting is 0 dB.

Note

The monitor output level does not change when you change the output level in OUT LEVEL. The monitor output level is adjusted separately.

For details about adjusting the monitor audio level, see "Adjusting the Monitor Audio Level" (page 12).

Displaying the accumulated running time (TIME)

Display the accumulated running time of the unit as a guide to total usage time.

The factory default setting is 00:00. Up to 99:99 can be displayed.

To reset the time display

- 1 Press and hold the SET button until the time display starts flashing.
- **2** Press the button to display "00:00 CLR" and press the SET button.

Pressing the + button when "00:00 CLR" is displayed causes the time display to start flashing. You can press the SET button in this state to cancel the reset of the accumulated running time.

Selecting the preferred power supply (PWR SOURCE)

Specifies whether the power supply from the batteries inserted in the unit or from an external USB portable power supply or accessory connected to the USB connector or auxiliary connector has precedence.

BATT -> EXT: Batteries inserted in the unit have precedence.

EXT -> BATT: Power supplied from a USB connector or externally connected sources have precedence.

BATT ONLY: Batteries inserted in the unit are used, and power supplied from the USB connector or auxiliary connector is not used even after the batteries are discharged.

Note

When BATT -> EXT or EXT -> BATT is specified and power from the preferred source is cut off, the power supply automatically switches to the other source. Therefore, when only one power supply is available, that power supply will be used regardless of the PWR SOURCE setting. There may be a brief interruption in the audio when the power supply switches.

Setting the battery type (BATTERY)

You can set the type of battery being used in order to provide a more accurate battery level indication.

TYPE1: Recommended setting when using alkaline LR6 (size AA) batteries. Indicates the battery level based on the characteristics of new Sony alkaline LR6 (size AA) batteries.

TYPE2: Recommended setting when using rechargeable nickel metal hydride batteries.

TYPE3: Recommended setting when using lithium batteries.

Note

The characteristics of batteries change according to battery type and environmental conditions. It is recommended that you understand the characteristics of batteries before using them.

Setting the display contrast (CONTRAST)

Adjust the contrast of text and icons on the display in the range 1 to 10.

The configurable values are given below. (Light) 1 2 3 4 5 6 7 8 9 10 (Dark)

Restoring factory default settings (RESET)

Restore all parameters to their factory default settings. Press and hold the SET button. A prompt appears asking you whether to restore factory default settings. Press the + or – button to select YES, then press the SET button. The unit parameters are restored to their factory default settings.

Displaying the software version (VERSION)

Display the software version of the unit.

RX (tuner) 1/2 Menu

For details on menu operation, see "Basic Menu Operations" (page 13).

Use this menu to set the digital wireless receiver functions (the main functions of this receiver).

Selecting group/channel (GP/CH)

The factory default setting varies depending on the model.

For details, see "Setting the Receive Channel" (page 9).

Setting an available channel automatically (AUTO SET)

Automatically search for and set an available channel, and start infrared transmission to the transmitter.

For details, see "Searching for available channels and configuring the channel settings via infrared communication (AUTO SET)" (page 11).

Selecting the frequency band (BAND)

Select the receive frequency band.

Note

This menu is not available on Japanese and Korean models. On these models, the frequency band cannot be selected.

For details about the groups and channels in each frequency band, refer to the "Frequency List" on the CD-ROM.

Searching for and selecting available channels (CLR SCAN)

Search for available channels.

For details, see "Searching for Available Channels within a Group (Clear Channel Scan)" (page 9).

Using infrared transmission (SYNC)

Transfer the frequency and compander mode set on the unit to a transmitter using an infrared transmitter.

For details, see "Configuring the group/channel manually and configuring the channel settings via infrared communication (SYNC)" (page 11).

Setting the compander mode (COMPANDER)

Set the operating mode of the compander.

For details, see "Setting the Compander Mode" (page 10).

Setting the frequency to an active channel (ACT SCAN)

Search for channels already in use. This is useful when using more than one receiver in combination with a single transmitter.

For details, see "Searching for Active Channels within a Group (Active Channel Scan)" (page 10).

Selecting the output connector for received audio (ASSIGN)

Select the connector from which to output received signals.

Under factory default settings, tuner 1 is set to OUT1 and tuner 2 is set to OUT2.

OUT1: Output the audio from the OUTPUT 1 connector. **OUT1/2:** Output the audio from both the OUTPUT 1 and OUTPUT 2 connectors.

OUT2: Output the audio from the OUTPUT 2 connector.

EXT.IN Menu

This menu allows you to configure settings for the microphone connected to the unit's external input connector.

Selecting the external microphone type (MIC SELECT)

Select which type of microphone is connected to the external input connector.

<u>OFF</u>: Select this when not using an external microphone. PLUG-IN PWR: Select this when using a plug-in power microphone.

MONO BMP +5V: Select this when using a Sony lavalier microphone.

Adjusting the input level (INPUT LEVEL)

Set the input level to a value between -12 to +12 dB. Adjust the value according to the type of microphone that is connected.

The factory default setting is 0 dB.

Setting the low-cut filter (LCF)

You can set the low-cut filter to reduce noise caused by wind.

You can set the cutoff frequency to OFF/LOW/MID/HIGH.

OFF: No filtering

LOW: 100 Hz cutoff frequency **MID:** 150 Hz cutoff frequency **HIGH:** 200 Hz cutoff frequency

Switching the phase of the microphone (PHASE)

You can switch the phase of a connected microphone to output audio in reverse phase.

NORMAL: Phase is not reversed. **INVERT:** Reverses the internal phase.

Selecting the output connector for audio inputs (ASSIGN)

Select the connector from which to output signal inputs. **OUT1:** Output the audio from the OUTPUT 1 connector. If the connected microphone is an LR type, the output will be mixed.

OUT1/2 (L/R): Output the audio from both the OUTPUT 1 and OUTPUT 2 connectors. If the connected microphone is an LR type, L will be output from the OUTPUT 1 connector and R will be output from the OUTPUT 2 connector.

OUT2: Output the audio from the OUTPUT 2 connector. If the connected microphone is an LR type, the output will be mixed.

Error Messages

When a problem occurs, one of the following error messages may appear on the display.

Message	Meaning	Solution
EEP ERROR	An error has occurred in the backup memory data.	Contact your Sony service representative.
PLL ERROR	An error occurred in the PLL synthesizer circuit.	Restart the unit. If the message persists, contact your Sony service representative.
NO TONE Audio signal output has been muted, because a tone signal different from the compander mode configured on the unit was received.		Configure the appropriate compander mode based on the transmitters you are using "Setting the Compander Mode" (page 10). When operating in conjunction with UWP-D series transmitters (UTX-B03, UTX-M03, etc.), set the unit and the transmitters to the same compander mode.

Troubleshooting

If you have any problem, use the following checklist before asking for repairs. If the problem persists, contact your Sony service representative.

Symptom	Cause	Solution
The unit does not turn on.	The \oplus and \ominus polarity orientation of the batteries is incorrect.	Insert the batteries with the correct polarity orientation.
	The batteries are getting low.	Replace the batteries with new ones.
	The battery terminals are dirty.	Clean the \oplus and \ominus terminals with a cotton swab.
	Batteries are not inserted despite PWR SOURCE being set to BATT ONLY.	Insert batteries, or change the PWR SOURCE setting.
There is no sound.	The channel setting on the transmitter is different from that on the receiver.	Use the same channel setting on both the transmitter and receiver.
	The compander mode setting on the transmitter is different from that on the receiver.	Use the same compander mode setting on both the transmitter and receiver.
The sound is distorted.	The channel setting on the transmitter is different from that on the receiver.	Use the same channel setting on both the transmitter and receiver.
The sound is weak.	The supplied cables and connected device are not connected properly.	Refer to the operating instructions of the connected device, and perform proper connections.
There is sound interruption or noise.	Two or more transmitters are set to the same channel.	Two or more transmitters cannot be used on the same channel. Refer to the frequency list stored on the supplied CD-ROM, and reconfigure the channel on each transmitter.
	The transmitters are not set to the channels within the same channel group.	The channel plan is set so that no signal interference occurs when two or more transmitters are used simultaneously. Set each transmitter to a different channel within the same channel group.
	Adjacent channels are being used.	Use the channels separated by at least two channels (250 kHz).
	Jamming radio waves are being received.	Set the channel on the receiver to a channel for which the RF indicator does not light, or use the Clear Channel Scan function to switch to a channel without interference. Then, set the transmitter to the same channel as the receiver. If using two or more transmitters, change to a channel group that is not affected.
The RF indicator on the receiver lights up even when the transmitter is off.	Jamming radio waves are being received.	Set the channel on the receiver to a channel for which the RF indicator does not light, or use the Clear Channel Scan function to switch to a channel without interference. Then, set the transmitter to the same channel as the receiver. If using two or more transmitters, change to a channel group that is not affected.
The transmitter channel cannot be set with infrared	The infrared receptor on the transmitter is too far from the infrared transmission port on the receiver.	Reduce the distance between the infrared receptor on the transmitter and the infrared transmission port on the receiver to within about 20 cm (8 in.).
transmission.	Interference from infrared communications between other devices or from direct sunlight is present.	The transmitting distance is reduced when interference from strong sunlight, for example, is present. Place the transmitter and receiver as close to each other as possible.

Important Notes on Use

Usage and Storage

- Operating the UWP-D series devices near electrical equipment (motors, transformers, or dimmers) may cause interference due to electromagnetic induction. Keep the devices as far from such equipment as possible.
- The presence of lighting equipment may produce electrical interference over a wide frequency range. In this case, interference may fluctuate with the position of the receiver antenna and position of the transmitter. Position the devices so that interference is minimized.
- To avoid degradation of the signal to noise ratio, do not use UWP-D devices in noisy places or in locations subject to vibration, such as the following:
 - Near electrical equipment, such as motors, transformers, or dimmers
 - Near air conditioning equipment or places subject to direct air flow from an air conditioner
 - Near PA (public address) loudspeakers
- Near equipment that might knock against the receiver Keep devices as far from such equipment as possible or use buffering material.

Cleaning

Clean the surface and the connectors of devices with a dry, soft cloth. Never use thinners, benzene, alcohol, or any other chemicals, since these may mar the finish.

To prevent electromagnetic interference

Some channels may be unable to be used due to noise generated due to the effects of external noise and/or radio interference. In this case, it is recommended to stop transmitting (turn the power off) or change to another frequency (change channel).

To prevent electromagnetic interference from portable communication devices

The use of portable telephones and other communication devices near the devices may result in malfunction and interference with audio signals. It is recommended that portable communication equipment near the devices be turned off.

Specifications

Antenna 1/4 λ wire antenna (angle-adjustable)

RF squelch level

 $15 \text{ dB}\mu / \text{OFF} (0 \text{ dB}\mu = 1 \mu\text{V})$

Audio output level

-60 dBV (modulating frequency of 1 kHz and frequency deviation of ±5.0 kHz)

Audio input level

-50 dBV (during -60 dBV output, 1 kHz input frequency)

Headphone output level

 $5 \text{ mW} (16 \Omega)$

Audio input/output connector

3.5 mm diameter mini jack

Reception method

Space diversity system (true diversity system during one-channel operation)

Local oscillator

Crystal-controlled PLL synthesizer

Receive frequencies

Models available in USA:

470 MHz to 542 MHz (UC14 model), 536 MHz to 608 MHz (UC25 model),

566 MHz to 608 MHz and

614 MHz to 638 MHz (UC30 model), 638 MHz to 698 MHz (UC42 model)

Models available in Europe:

470 MHz to 542 MHz (CE21 model), 566 MHz to 630 MHz (CE33 model), 638 MHz to 694 MHz (CE42 model),

Model available in China:

710 MHz to 782 MHz (CN38 model)

Model available in Korea:

925 MHz to 937.5 MHz (KR Model)

Model available in Thailand

794 MHz to 806 MHz (E model)

Signal-to-noise-ratio

60 dB or more (A-weighted)

Voice delay 0.375 ms Deemphasis 50 µs

Reference frequency deviation

±5 kHz

Frequency response

40 Hz to 18 kHz

Distortion 0.9% or less (with modulating frequency

of 1 kHz and frequency deviation of

 $\pm 5.0 \text{ kHz}$

Tone signal In UWP-D compander mode:

32.382 kHz

In UWP compander mode: 32 kHz In WL800 compander mode:

32.768 kHz

Indicators POWER, RF 1/2

Operating temperature

0 °C to 50 °C (32 °F to 122 °F) (when charging: 0 °C to 35 °C (32 °F to 95 °F))

Storage temperature

-20 °C to +55 °C (-4 °F to +131 °F)

Supply voltage 3.0 V DC (two LR6/AA size alkaline

batteries)

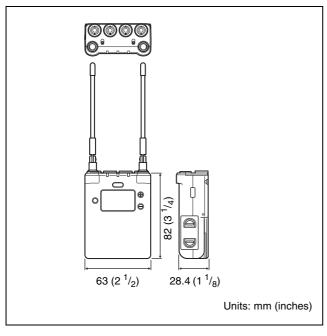
5.0 V DC (supplied from USB connector) (170 mA during twochannel operation; 500 mA when charging nickel metal hydride

batteries)

Battery life Approx. 5 hours (measured with two Sony LR6/AA size alkaline batteries

at 25 °C (77 °F))

Dimensions



 $63 \times 82 \times 28.4 \text{ mm}$ $(2^{1}/_{2} \times 3^{1}/_{4} \times 1^{1}/_{8} \text{ in.})$ (Width / height / depth) (excluding antenna)

Mass Approx. 160 g (5.6 oz.) (excluding batteries)

Supplied accessories

Shoe mount adapter (1)

Belt clip (1)

XLR-BMP conversion output cable (2) Stereo mini plug-BMP conversion cable

Battery case (1) (Chinese model only)

Before Use (1) CD-ROM(1)

Warranty card (1) (North American and Korean models only)

Design and specifications are subject to change without notice.

Notes

- Always verify that the unit is operating properly before use. SONY WILL NOT BE LIABLE FOR DAMAGES OF ANY KIND INCLUDING, BUT NOT LIMITED TO, COMPENSATION OR REIMBURSEMENT ON ACCOUNT OF THE LOSS OF PRESENT OR PROSPECTIVE PROFITS DUE TO FAILURE OF THIS UNIT, EITHER DURING THE WARRANTY PERIOD OR AFTER EXPIRATION OF THE WARRANTY, OR FOR ANY OTHER REASON WHATSOEVER.
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